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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/577,034	05/23/2000	James K. Guenter	M10 26373 US	3363	
128	7590 05/20/2003				
HONEYWELL INTERNATIONAL INC.			EXAMINER		
101 COLUMBIA ROAD P O BOX 2245			VY, HUNG T		
MORRISTO	WN, NJ 07962-2245		ART UNIT	PAPER NUMBER	
			2828	,	
			D	D. TE	

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

				No. /				
		Application No.	Applicant(s)	MP				
Office Action Summary		09/577,034	GUENTER ET AL.					
		Examiner	Art Unit					
	•	Hung T Vy	2828					
Period fo	The MAILING DATE of this communication apport	pears on the cover shet with the c	correspond nc address					
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	I36(a). In no event, however, may a reply be tir ly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	mely filed ys will be considered timely. In the mailing date of this communication (C) (35 U.S.C. § 133).	ı.				
1)🖂	Responsive to communication(s) filed on 27	<u>March 2003</u> .						
2a)⊠	This action is FINAL. 2b) The	nis action is non-final.		,				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
•	on of Claims							
<i>,</i> —	Claim(s) 1-22 is/are pending in the application		ρ					
	4a) Of the above claim(s) is/are withdra	wn from consideration.	Paul P					
	Claim(s) is/are allowed.		DALII ID					
-	Claim(s) 1-22 is/are rejected. SUPERVISORY PATENT EXAM SUPERVISORY PA							
	Claim(s) is/are objected to.	•	TECHNOLOGY CENTER 2800					
•	Claim(s) are subject to restriction and/o on Papers	or election requirement.						
9) 🗌 .	The specification is objected to by the Examine	er.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
,	The oath or declaration is objected to by the Ex	kaminer.						
-	ınder 35 U.S.C. §§ 119 and 120							
•	Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).					
a)[☐ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
* 5	3. Copies of the certified copies of the pric application from the International Bu See the attached detailed Office action for a list	ıreau (PCT Rule 17.2(a)).	_					
14) 🗌 A	Acknowledgment is made of a claim for domest	ic priority under 35 U.S.C. § 119(e) (to a provisional applicat	ion).				
) The translation of the foreign language proceeds Acknowledgment is made of a claim for domes							
Attachmen								
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1</u>	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)					

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DETAILED ACTION

1. In response to the amendment filed on 03/27/2003, claims 1-22 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 3. Claims 1, 21 and 22 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Jopson et al., U.S. patent No. 6,380,533.

Regarding to claims 1, and 21, Jopson et al. disclose a polarization controlled optical energy source, comprising: a laser source (100) that produces a light output that has at least two polarization states (all the laser source have two polarization); and polarization medium (110) positioned in proximal relation to the laser source element for polarizing the light output in a third polarization state (See fig 5, 6 and column 3, line 25-40). It is inherent that at an incidence angle of the light to medium then the polarization medium is selecting and attenuate each of the at least two polarization states equally or

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substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states (See fig 2).

With respect to claim 22, the methods for providing a relatively constant light intensity output from a light source are considered as product by process steps.

4. Claims 1, 21 and 22 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Joseph et al., U.S. patent No. 3,609,008.

Regarding to claims 1, 21 and 22, Joseph et al. discloses a polarization controlled optical energy source, comprising: a laser source (20) that produces a light output that has at least two polarization states (all the laser source have two polarization); and polarization medium (22) positioned in proximal relation to the laser source element (See fig 4) for polarizing the light output in a third polarization state (see column 3, line 48-65). It is inherent that at an incidence angle of the light to medium then the polarization medium is selecting and attenuate each of the at least two polarization states equally or substantially equally.

Claim Rejections - 35 U.S.C. § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth insection 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

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to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Regarding claims 2-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Jopson et al., U.S. Patent No. 6,380,533, in view of Davis et al., U.S. patent No. 6,069,905.

Regarding claims 3, 5, 8-10, 13, 14, and 20, Jopson et al. discloses a laser source element (100), a polarization medium (110), a linear polarization element, having a polarization direction (See column 6, line 35-58), but Jopson et al. does not disclose a vertical cavity surface emitting laser with a package base, a package cover. However, Davis et al. disclose a polarization controlled optical energy source with a package base (See fig 7), a vertical cavity surface emitting laser device, package cover, and polarization medium (See fig 7). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Jopson et al. to have a vertical cavity surface emitting laser with a package base, a package cover that of Davis et al., because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of, but further increasing the performance of, the invention of Jopson et al.

Regarding claims 2,6 and 7, Davis et al, disclose the source, wherein said laser source element is disposed within a component package having an emission aperture formed therein. (See column 3, lines 13, and column 3, lines 2 and fig 3).

Regarding to claim 4, Davis et al, disclose the source, wherein said laser source element (10) has multiple distinct polarization states oriented with respect to one another at angular intervals. (See fig 13).

Regarding to claim 11, Davis et al. disclose the source, wherein said polarization medium 39 is affixed to the component package spanning the emission aperture. See Fig 7.

Regarding to claim 12, Davis et al. disclose the source, wherein said polarization medium (39) is disposed within the component package between the vertical cavity surface emitting laser (10) and the emission aperture. (See column 5, line 33 –37 and fig 7).

With respect to claims 15-19, the methods for VCSEL polarization control are considered as product by process steps.

Citation of Pertinent References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Park discloses Optical Head Having Two Vertical Cavity Surfce Emitting Lasers With Different Wavelengths, U.S. Patent No. 5,986,998.

The patent to Johnson et al. discloses Chiral smectic Liquid Crystal Polarization Interference filters, U.S. Patent No. 5,231,521.

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The patent to Fossey et al. discloses Switchable Two-wavelength Frequency-converting Laser System and Power Control Therefor, U.S. Patent No. 5,361,268.

The patent to Kurata et al. discloses Pretilt Angle Measuring Method and Measuring Instrument, U.S. Patent Application Pub. No.20030071995.

Response to Arguments

Applicant's arguments with respect to claims 1-22 have been considered but are most in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (703) 605-0759. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

PAUL IP SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

Hung T. Vy

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May 9, 2003